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Genesis of the N. H. College of Agriculture  
and the Mechanic Arts.

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# HISTORICAL ADDRESS

AT THE DEDICATION OF THE

NEW HAMPSHIRE COLLEGE OF AGRICULTURE  
AND THE MECHANIC ARTS,

At Durham, on Wednesday, August 30, 1893.

BY

JOSEPH B. WALKER.

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## HISTORICAL ADDRESS.

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*Mr. President and Ladies and Gentlemen:* My theme is the Genesis of the New Hampshire College of Agriculture and the Mechanic Arts. It has occurred to me, that in attempting to discharge as best I may, the honorable duty assigned me, I had best say what I know and leave unsaid what I do not know, in relation to the subject before us. If such action be not universal on such occasions, and will restrict me pretty much to the early history of the college, its adoption will shorten my discourse and less severely strain your patience.

It is not easy to comprehend a great idea, particularly at its advent. It is only when it has been developed into some concrete form, that it is wholly or largely appreciated.

At the beginning of this century, our distinguished countryman, Count Rumford, by whom science was esteemed largely in proportion as it could be made practically useful, aided by persons of rank and fashion in England, founded the Royal Institution of London. Its object was the instruction of English artisans in the practical and scientific principles which underlaid their respective callings.

The importance of this idea of the Count, great as it was, seems to have been but partially grasped by his high-born patrons. When, at length, they fully comprehended the object he had in view, he was given to understand that they desired entertaining lectures and brilliant experiments, of interest to fashionable people, and not the industrial instruction of mechanics. Thereupon the count retired in disgust, and the conduct of his enterprise swung into line with the wishes of its patrons, but not before he had broached the great idea of

popular scientific education, although he had done it fifty years too soon. Yet, like a seed dropped into fertile earth, it was planted, and destined in due time to germinate.

Half a century later, during which it lay buried and apparently dead, it appeared above the surface, and has since grown with almost unparalleled vigor and rapidity. By that time, it had become evident to observing and reflecting educators, that popular instruction in the principles underlying the arts and trades of every-day life was required in greater measure than it had been furnished by our then existing colleges. As a consequence of this belief, schools of applied science began here and there to appear. The Boston School of Technology sprang almost instantaneously into perfect being, just as did the fabled Minerva from the head of Jove. Their advent was hailed with hope and cheer. An officer of the institution just mentioned remarked, some ten years after its establishment, that it had already attained a point in its career which it hardly dared hope to reach at the end of fifty. The explanation of this gratifying surprise is to be found in the fact that the institution met a public want and for that reason received the support of that public.

Just before the outbreak of our civil war, the Hon. Justin S. Morrill, then a representative of Vermont in the congress of the United States, succeeded in having passed by both branches of that body, a bill for the establishment of scientific colleges in the several states. But President Buchanan, who was more famed for his prudence than for his boldness, saw fit to veto it, and it failed to become a law.

This was in 1857. Neither Mr. Morrill, nor those associated with him in this philanthropic effort, were disheartened by the failure thus encountered. A few years later he championed another bill of like import, which was also passed by the senate and house of representatives, and, on the second day of July, 1862, became a law by the approval of President Lincoln, who had both foresight and far sight, and possessed the courage of his convictions.

It is worthy of our remembrance on this occasion, that the same right hand which rendered operative this act of congress, the very next year struck from their limbs by a single blow the

shackles of some six millions of slaves, and thereby rendered our Declaration of Independence true.

This act was entitled "An act donating public lands to the several states and territories which may provide colleges for the benefit of agriculture and the mechanic arts." By it there was granted "to the several states, for the purposes hereinafter mentioned, an amount of public land to be apportioned to each state, a quantity equal to 30,000 acres for each senator and representative in congress, to which the states are respectively entitled by the apportionment under the census of 1860."

The whole amount thus donated to 38 states as certified by the United States land commissioner in February, 1876, was 10,000,000 acres, exceeding the combined areas of Massachusetts, Rhode Island, and Connecticut by nearly a million. Never before, nor since, has so grand a provision been made by any nation, by a single act of its government, to diffuse scientific education among its citizens, as was done by the enactment of this law, and the names of Abraham Lincoln and Justin S. Morrill should be engraved upon the memorial tablets of every college of agriculture and mechanic arts in the land.

As New Hampshire was then represented in congress by two senators and three members of the house of representatives, she became entitled to 150,000 acres of public land.

This act further provided, that the grants made under its provisions should be made upon express conditions, some of which were the following :

1. That if the fund derived from the sale of any of the lands thus granted to any state should, at any time, become impaired, it must be restored by that state to its original amount.

2. "That no portion of such fund, nor the interest thereon, shall be applied, directly or indirectly, under any pretence whatever, to the purchase, erection, preservation, or repair of any building or buildings."

3. "That any state which may avail itself of the benefit of this act shall provide, within five years at least, not less than one college, as described in the fourth section of this act, or the grant to such state shall cease," and, in that case, that the state should pay over to the United States all money derived from the sale of any land thus received.

4. That no state should be entitled to the benefits of this act unless it should express its acceptance thereof, by its legislature within two years from the date of its approval by the president.

There were still other conditions, which we pass for the want of time, but which, with the foregoing, furnish indubitable evidence of the wisdom and care with which this most important educational bill which any government ever enacted into a law, was matured and drawn. *Most* important, I say, inasmuch as it provides for the establishment of one or more colleges for the teaching of industrial science in every loyal state of this great Union.

This act of congress, which, for brevity, I shall hereafter speak of as the Morrill act, was approved, as before stated, on the second day of July, 1862. Our legislature, then in session and on the eve of final adjournment, at once signified its acceptance of it by a joint resolution which was approved by the governor, July 8, 1862, six days only after the act had become a law. Had the promptness of this legislature been shown by its immediate successors, the New Hampshire College of Agriculture and the Mechanic Arts would to-day have been an older institution by some years than it is, and you would have been saved the tedium of some dry narrative which fidelity to historic truth impels me to impose upon you just here and now.

The next year, 1863, Governor Gilmore, in his message to the legislature, called their attention to this subject, and an act more in detail than the resolution just alluded to was passed, "for the reception of a grant of land by congress and to create a fund for the promotion of agriculture and the mechanic arts."

This act, which was approved July 9, 1863, provided for the acceptance of the grant made to the state by the United States and of the conditions attached thereto; it authorized the governor to receive all the land scrip to which the state was entitled, and directed him, under the advice of the council, to appoint a commissioner, and fix his compensation, to take charge of the same; it also provided that the money derived from the sale of this scrip should constitute a perpetual fund



to be in the custody of the state treasurer and entitled "The fund for the promotion of agriculture and the mechanic arts," and that the governor, with the advice of the council, should appoint a committee of ten persons, one from each county, "who, from their profession and pursuits, may, in their judgment, be best qualified for the duty, who shall, after the fullest inquiry and consultation, propose a scheme for the establishment of a college for education in agriculture and the mechanic arts, and make a printed report thereon to the legislature at its next June session."

Not long after the assembling of the legislature in 1864, the special committee, previously appointed by the governor to consider and report their views upon the subject of the establishment of an agricultural college, made a report recommending the establishment of such an institution, accompanied by the draft of a bill for its incorporation, and an offer by the Hon. David Culver, of Lyme, a member of the house of representatives that year, to give to the state, in aid thereof, a farm of four hundred acres, in Lyme, estimated by him to be worth \$20,000, and the further sum of \$30,000, in interest bearing securities, provided the proposed college be located in that town.

This report was made to the legislature on the 15th day of June. On the 21st it was referred to a select committee of ten. Some two week later, July 7, this last named committee reported to the house a bill entitled "An act to establish the New Hampshire Agricultural College." This took the routine course, was read twice, laid on the table to be printed, and on July 14 was taken therefrom and ordered to a third reading. The next day the house

*Resolved*, That the further consideration of the bill providing for the establishment of an agricultural college in this state be referred to the next session of the legislature, and that the clerk be directed to publish this resolution in the several newspapers of the state, and invite propositions for the location thereof from the several towns, cities, institutions of learning, and individuals who may take an interest therein and lay the same before the next legislature for the consideration thereof.

The next year, 1865, Governor Smyth again called the attention of the legislature to the subject of an agricultural college,

as one awaiting their consideration and disposal. As in years past, the house appointed a select committee of ten, to whom was referred "the message of his excellency, the governor, and accompanying papers," relative to an agricultural college. Nine days afterwards, on the 30th day of June, upon the recommendation of this committee, the house of representatives

*Resolved*, That the bill providing for the establishment of an agricultural college, and accompanying papers, be postponed to the next session of the legislature, and that the governor, with the consent of the council, be requested (if he shall deem it for the interest of the state) to sell and dispose of all the interest the state has in and to certain lands donated to the state by the general government, for the purpose of establishing an agricultural college,

and so farther action was deferred for another year.

Another twelve months passed, and the legislature of 1866 came together on the 6th day of June. Nearly four years had elapsed since the state accepted the provisions of the Morrill law, and it had become apparent that a college for instruction in agriculture and the mechanic arts could not be created by postponing all bills introduced for that purpose to the next session of the legislature. It was also apparent that, if such a college were not established by New Hampshire within a year from the 2d day of July following, it would forfeit the grant made by the Morrill law to aid in its support. It was necessary, therefore, that some action should be taken at that session.

In his message to the legislature, Governor Smyth once more called attention to the importance of early action in relation to the establishment of an agricultural college, and, in consideration of the smallness of the fund likely to be realized from the sale of the landscrip donated by the United States in aid thereof, and of the further fact that the Hon. David Culver had deceased, and that his will, in which his offer, before alluded to, had been embodied, was contested, he recommended that a college be established at Hanover, with such a connection with Dartmouth college as the trustees of the two institutions might deem mutually advantageous.

In accordance with these recommendations of his excellency, the house of representatives, on the 14th day of June, appointed

a select committee of ten,\* one from each county, to again take into consideration the creation of an agricultural college.

On the 26th day of the same month, Mr. Bailey, of Lyme, offered three resolutions in the House of Representatives, which, after reciting the death of Mr. Culver on the 14th day of June, 1865, the provisions of his will in aid of an agricultural college, conditioned upon its location at Lyme, and the assent of Mrs. Culver thereto; committed the state to the acceptance of the legacy of Mr. Culver, upon the terms proposed.

These resolutions were referred to the select committee just mentioned, and three days afterwards, on the 29th of June, were, upon its recommendation, indefinitely postponed.

On the day after, June 27th, the chairman of that committee reported a bill for the establishment of the New Hampshire College of Agriculture and the Mechanic Arts. This bill, after much discussion and some amendments, passed the house upon a call of the previous question, on the fifth day of July. It also passed the senate on the sixth, and received the governor's approval on the day following. Thus, my friends, was born, on the seventh day of July, A. D., 1866, the New Hampshire College of Agriculture and the Mechanic Arts.

I ought, perhaps, to apologize for having detained you so long with these arid, legislative details. If it be true that misery loves company, you may derive some consolation in your weariness from the fact that, to the early friends of the college, the long delays and slow advances just mentioned were more painful than the tedium which I have to-day inflicted upon you.

Besides, these dry records, condensed as much as possible from the journals of the general court, are the veritable history of its genesis.

Not long after the enactment of the law which gave being to the college, a board of nine trustees was appointed, five by the governor and council and four by Dartmouth college. A contract for furnishing instruction in part to its prospective students,

\* This committee consisted of Joseph B. Walker of Concord, Asa P. Cate of Northfield, Ellery A. Hibbard of Laconia, Dexter Richards of Newport, William H. Haile of Hinsdale, Hosea Eaton of New Ipswich, George N. Murray of Canaan, Ezra A. Stevens of Portsmouth, Wolcott Hamlin of Dover, and Isaac Adams of Sandwich.

and for other purposes, was agreed upon and executed by the two institutions. Still later, on the 28th day of April, 1868, Ezekiel Webster Dimond, then travelling in Europe, was appointed first professor of the institution.

Professor Dimond, then a young man, had been born and bred a New Hampshire farmer. Impelled by an irresistible desire for a liberal education, and possessed of but scanty pecuniary means, he prepared himself, as best he could, and entered Middlebury college, from which he was graduated in 1865.

A very strong love for the natural sciences led him to Cambridge, where he became a pupil of Professor Agassiz. When afterwards discovered by the trustees of this college, he was teaching chemistry at Worcester, Massachusetts, where he had written a work on the "Chemistry of Combustion," which was published in 1867, and gave him some reputation as a chemist, as well as a satisfactory pecuniary return. He was, at this time, 31 years of age, anxious to do good to others and make the most of himself.

Such was the first professor in this institution. For a time, he and President Smith, of Dartmouth, constituted its entire faculty. This was indeed a day of small things, but it was a step in the progress which has since brought this college to its present praiseworthy position.

Professor Dimond, having returned from abroad in August, 1867, went at once to Hanover to make preparations for the opening of his college, but he found there no college, hardly a storage room for the books and apparatus which he had purchased for it in Europe.

It may be interesting to take a general inventory of what the college then had, and of what it had not.

1. It had great expectations and unlimited possibilities.
2. It had a very respectable board of trustees, who desired to accomplish a great deal and had very narrow means with which to do it. The land donated by the United States had been sold and yielded a fund of \$80,000, to be kept intact forever, and an annual available income of \$4,800.
3. It had a faculty of two learned professors: a fit body, though few.
4. It had a class of students who could be numbered on the

fingers of one hand, coupled with a prospect for more which was the reverse of cheering.

5. It had a few books and a little apparatus, but no place to store either.

6. Lastly, and most encouragingly, it had some warm friends who had faith in the college, and were determined to stand by it.

The sum total of these items I leave to your computation.

From this not very brilliant showing, we will turn to the inventory of what the college had not.

1. It had not a single building in which to lay its official head or bestow its goods.

2. It had no system of study, nor any valuable precedents from which to form one. There were then no agricultural colleges in this country, and the suggestions to be had from those abroad, were, for various reasons, quite limited.

3. It had no text-books on applied science, such as its students were sure to need. These had then no existence. They were yet to be written.

4. It had no corps of professors to teach intellectually and practically many of the studies which its students were expected to pursue. These were yet to be made.

5. It had no sufficient endowment with which to meet the demands to be made upon it.

6. Saddest of all, its managers, of whom your speaker had the high privilege or great misfortune to be one, had but vague conceptions of the precise product which the college was expected to furnish. The hole in the grind-stone before them had been bored but half through, and the light was all on the farther side of it.

I also leave for your computation this very carefully prepared inventory of what the college had not.

In fact, in 1867, the ideal of an American college of agriculture and mechanic arts did not exist. This institution was therefore left, from necessity, to develop itself, from stage to stage, into the great and useful college which has brought us here to-day.

I have said that its progress was retarded by the narrowness of its resources. Such, for some time, was the fact, but it was ere long relieved of this embarrassment. You have all doubt-

less observed that an impecunious individual, honestly striving to do good, is quite sure, sooner or later, to obtain the means he needs. It was so with this college, and in the first instance on this wise.

In 1870, Mr. John Conant, a tall, solemn, thoughtful, hard-fisted farmer, whose piety was of the practical kind; who had made an honest fortune at the foot of Monadnock mountain, and wished, in his old age, to execute his own last will and testament, consulted a friend of the college as to how he could best do something for agricultural education in New Hampshire; whereupon, his attention was called to the aims and wants of this institution. As he was a stranger to its officers, this friend accompanied him to Hanover, that he might there make their acquaintance and his own investigations, for he was a man whose faith was governed largely by his sight.

They were met at the station, one day about noon, by Professor Dimond, and taken in a very plain, open wagon to his modest one-story house, on what became afterwards the college farm. Here he found extreme neatness, simplicity of furnishings, and a good dinner.

Inwardly fortified by the latter, the old gentleman asked to be taken over the farm. It was ere long evident that he liked the look of things. Watching his opportunity, as the professor's attention was turned aside, he said confidentially, and in an undertone to his friend, "The professor says that he bought this farm to secure it for the college, and that, if I want it for the college, he will sell it to me for its cost and interest. I am thinking about buying it."

Later in the afternoon, the friend was again taken aside, and confidentially told, "The professor tells me that since he has bought this place he has laid out about \$200, exactly how much, the bills will show, in painting, papering, and otherwise repairing the house. Do you think I ought to pay for those repairs?" To the remark that it seemed reasonable that he should, he thoughtfully replied, "I think so myself."

Later still in the day, the immaculate tea service of Mrs. Dimond, and the frank conversation of President Smith, who had been invited to meet Mr. Conant, seemed to deepen his favorable impressions.

The next morning, in his solemn way, he said to his confidant of the day before, then about to leave him, "I shall buy this farm and give it to the college. I may do more, but I want first to pay the \$10,000 which I have promised to give to New London academy, and get from its trustees 'a moral discharge.' They expect I shall do more, but I have n't agreed to, and I shan't."

It is to be presumed that Mr. Conant afterwards obtained his "moral discharge," inasmuch as his first and later gifts to this college amounted to about \$60,000. They were of the more importance to the college, as they came to it when a dollar was worth to it more than a dollar, from a person who knew what he was about, and whose sharp discernment was rarely at fault.

Just here, perhaps as well as anywhere, ends the genesis of the New Hampshire College of Agriculture and the Mechanic Arts. That was to be my theme, and I must not transcend it.

But I feel that I should be derelict to an imperative duty did I fail to allude with profoundest respect to the inestimable services rendered to this institution in its infancy by President Asa D. Smith, then also president of Dartmouth college, and by its first professor, Ezekiel W. Dimond.

They were both broad men. They both believed in the application of science to the arts and occupations of every-day life. They were both in heartiest sympathy with the aims of this college, and contributed lavishly of their knowledge and of their strength to the advancement of its interests. The latter died July 6, 1876; the former, August 16, 1877. They both sleep, within sound of the old college bell, in the beautiful cemetery which overlooks the Connecticut and its beautiful valley.

From to-day, this 30th day of August A. D. 1893, this college takes a new departure, in a new locality, and on broader lines, as an independent institution, with no alliances with any other, except those of sympathy and good will. I once believed that it would work out its destiny upon the banks of the Connecticut, midway between two important manufacturing and agricultural states, from which its students would mostly come. Twenty-five years ago, as a trustee, I voted for its location at

Hanover, and have been hoping that it would eventually repay to our beloved old Dartmouth any aid she might have afforded it in its infancy, by becoming in its manhood a coördinate branch of a great New Hampshire university, of which Hanover should be the seat and Dartmouth the head.

But, as Burns has truly told us,

“The best laid schemes o’ mice and men gang aft agley.”

Things unanticipated have come to pass, and now, with its rich experiences, a full corps of able officers and professors, a comfortable endowment, to be quadrupled in amount half a generation hence, the New Hampshire College of Agriculture and the Mechanic Arts has seen fit to remove from our western border and set up its household gods here, upon the banks of the Piscataqua, in this grand old town of Durham, whose history is as honorable as its annals are full—the town of Gen. John Sullivan and of Ebenezer Thompson; the town of Prof. John S. Woodman, and of Benjamin Thompson, whose name was identical with the family name of Count Rumford, and whose great purpose to aid the industrial classes of mankind was also the same; the town where the English gunpowder from Fort Constitution tarried for patriotic baptism when on its way to Bunker Hill; a town which was once an important mart of trade, which has always been a good farming town, and is henceforth to be one of the most important educational centres of the state.

The traveller leaving Boston by this railroad sees on his right a gray granite shaft towering skyward, some three or four hundred feet above him—silent, simple, grand. It commemorates the Battle of Bunker Hill, and stands for the resistance of an intelligent yeomanry to governmental oppression, and for popular liberty.

As he passes eastward some three score miles, these substantial structures attract his notice. For what do they stand?

If I understand aright the president, trustees, and professors of this college, they stand for faithful instruction in industrial science, not only in the class-room, but in the field and shop as well.



If I understand aright the desire of the farmers of New Hampshire, it is that such of their boys as may come here shall be taught not merely why agricultural manipulations are necessary, but how to conduct them.

If I understand aright the expectations of the mechanics of New Hampshire, it is that such of their boys as may come here shall be taught not merely the composition, strength, and adaptability of materials, but the practical shaping of the same in the work-shops of the college.

If I understand aright the expectations of the women of New Hampshire, they are that such of their daughters as chance to come here shall be taught not only the scientific principles underlying their common avocations, but their operations by actual practice.

If I am right in these expressions of my belief, the college and its patrons are in accord, and its success is assured.

We therefore congratulate the college upon its favorable prospects and surroundings. We congratulate it upon the possession of these stately structures, a credit alike to their designers and their builders. As it takes its new departure and moves onward into the opening future, our sympathies, our confidence, and our heartiest good wishes attend it. Prayerfully we say,—

“Live on, O glorious school of state!  
Live on, O power good and great!  
Our hopes, our hearts, are all with thee,  
Our hearts, our hopes, our prayers, our tears,  
Our faith triumphant o’er our fears,  
Are all with thee, are all with thee.”





